TECHNICAL NOTES FOR THE MEPS INSURANCE COMPONENT (MEPS IC)

DESCRIPTION OF SURVEY

The MEPS IC is an annual survey of establishments that collects information about employer-sponsored health insurance offerings in the United States.

The MEPS IC sample of employers is actually two different samples:

- The List Sample - a nationally representative sample of employers developed from Census Bureau list frames.
- The Household Link Sample - a sample of employers of persons who respond to the MEPS Household Component (MEPS HC) survey.

Although these two samples are from different sources and the data are collected for different analytical purposes, the questions asked of the respondents are identical. Thus, to save costs and reduce respondent burden by having a single data collection, editing, and imputation process, these two survey collections have been integrated into a single data collection effort**. All of the tables posted on the MEPS IC web site are derived from the List Sample. This technical note focuses exclusively on the data from the List Sample.** More information on the Household Link Sample can be found at http://www.meps.ahrq.gov/Data_Pub/HC_IC_Link.htm.

MEPS IC tables are available for each year beginning with 1996. The most recently available data are for 2000. Tables for 2001 will be available in August 2003.

SAMPLE DESIGN OF THE MEPS IC LIST SAMPLE

The MEPS IC List Sample consists of a random sample of private-sector business establishments with at least one employee and a sample of State and local government employers. In 1996, there was a separate, independent sample of self-employed persons with no employees. This sample was dropped after 1996 due to poor response rates and because many self-employed did not have insurance as self-employed individuals. Instead they obtained insurance through another employer or through their spouse's employment. Federal government employees are not sampled because complete data on Federal government employees and their health insurance are already available directly from the U.S. Office of Personnel Management.

The List Sample is selected from two list frames maintained by the Bureau of the Census:

- The Standard Statistical Establishment List (SSEL).
- The Census of Governments.

The SSEL is a list of private-sector establishments with at least one employee that is developed and maintained by the Census Bureau. It is derived from administrative records (Kreps, Slater and Plotkin, 1979). The SSEL is updated on a regular basis as administrative records become available. The MEPS IC sample for each year is drawn from the SSEL available in the Spring of the following year. This frame contains businesses that existed at the beginning of the sample year and is supplemented with business births received through the third quarter of that year.

The Governments Division of the Census Bureau produces the Census of Governments once

every 5 years and the MEPS IC survey samples are drawn from the most recently available version. The 1996 MEPS IC sample was drawn from the 1992 Census of Governments; the 1997 through 2000 MEPS IC samples were drawn from the 1997 Census of Governments.

State samples and estimates

In addition to national estimates, the sample allocation and design of the IC list sample also support reliable State level estimates of:

- establishment characteristics (for example, the percent of establishments that offer health insurance),
- employee characteristics (for example, the percent of employees that enroll in health insurance plans), and
- premiums and employee contributions for those enrolled in employer-sponsored health insurance plans.

Survey cost constraints prevent the fielding of a sufficiently large sample to support State estimates for all 50 States and the District of Columbia every year. (For survey purposes, the District of Columbia is treated as a State.) In 1996, estimates were made for the 40 most populous States. Beginning with 1997, the MEPS IC sample began a rotation of the 20 least populated States to insure that every State receives an adequate sample size to make State-level estimates at least once every four years.

The rotation scheme implemented for the twenty States affected for survey years 1996 through 2000 are shown below in alphabetical order. "X" indicates the year(s) for which State estimates have been made for that State.

STATE	1996	1997	1998	1999	2000
Alaska		X			
Arkansas	X	X	X	X	X
Delaware			X		
District of Columbia		X			
Hawaii	X	X		X	
Idaho			X		
Maine	X	X		X	
Mississippi	X	X		X	X
Montana				X	
Nebraska	X		X	X	X
Nevada	X	X		X	
New Hampshire			X		X
New Mexico	X		X		X
North Dakota					X
Rhode Island		X		X	
South Dakota					X
Utah	X	X	X		X
Vermont				X	
West Virginia	X		X		X
Wyoming			X		

The State rotation schedule has been modified for 2001 through 2004 to reflect changes in State populations based on the 2000 Census. The rotation scheme for the twenty States affected for survey years 2001 through 2004 is shown below in alphabetical order. "X" indicates the year(s) for which State estimates will be made for that State.

STATE	2001	2002	2003	2004
Alaska	X			
Arkansas	X		X	X
Delaware		X		
District of Columbia	X			
Hawaii	X		X	
Idaho	X		X	
Kansas		X	X	X
Nebraska		X		X
Nevada	X	X	X	
New Hampshire		X		X
New Mexico		X		X
North Dakota				X
Maine	X		X	
Montana			X	
Rhode Island	X		X	
South Dakota				X
Utah	X	X		X
Vermont			X	
West Virginia		X		X
Wyoming		X		

There have been occasions where Federal agencies, State governments, and non-profit organizations have provided additional funding to increase samples in selected States. The two reasons for funding larger samples in a given State are 1) to improve the accuracy of the State estimates for that year or 2) to provide sufficient sample for production of State estimates in a year where no estimates would have been produced otherwise. In the table below, States that received increased samples are listed by year. 2001 is the first year where the increased samples will result in additional State level estimates. These additional estimates will be made available on the MEPS IC web site to all data users, but will be separate from the existing table series.

YEAR	STATES WITH ADDITIONAL SAMPLE PURCHASES
1998	Arizona, Massachusetts, Washington
2000	Arkansas, Wisconsin
2001	Delaware, Vermont, Kansas*, New Hampshire*, South Dakota*, Wisconsin

* These States received additional sample to support estimates for smaller firms only.

Sample selection process

The MEPS IC design was developed in several steps. The first step was the allocation of sample to the States. An initial sample of 18,500 was allocated to all States proportional to the number of employees in the State. The original proportional allocation number was then increased to a minimum sample size goal of 600 for each of the 40 selected States whose allocation fell below this minimum. The sum of the individual State samples was the desired national total sample of

establishments. In these tables, national estimates and estimates for 40 individual States are given each year. The remaining States are pooled into an estimate for "States not shown separately." While samples are fielded in these remaining States each year in support of the national estimates, their sample sizes are not sufficient for producing estimates at the State level.

Next, the State allocations were divided between the private-sector and governments. This was done in an iterative manner as follows:

- The Federal government and all State governments were determined to be selected with certainty.
- A local government sample was allocated within each State using the local government proportion of the remaining public and private employment within the State. The total of these allocations was used to determine which of the remaining local governments were large enough to be deemed certainty selections because of their size.
- After removing this first set of local certainty governments, the remaining local governments were allocated a sample based on their proportion of the remaining employment after all government certainties were removed. A second set of certainty governments were then determined following the same criteria used in the first step. This process was repeated until no more certainty governments were determined.
- Within each State, the allocation of the sample of the remaining noncertainty governments was determined using the noncertainty governments' proportion of the remaining employment within each State and the remaining sample after the certainty governments were removed.

After the sample was allocated to the public and private sectors, the sample within each sector within each State was allocated to strata. For governments, no further explicit allocation was performed, although the file used for the systematic sample selection of governments was sorted by size within each State.

For the private-sector, 14 strata were used within each State. These strata were determined by a cross of the size of the establishment itself and the size of the firm to which the establishment belonged. These two characteristics were used for stratification because:

- Size of firm is correlated with whether an establishment offers health insurance and the characteristics and costs of that insurance.
- Size of establishment is correlated with counts of employees eligible for and enrolled in health insurance.

Allocation to each stratum was determined using a Neyman allocation scheme (Cochran, 1977) with variances initially obtained from the 1993 National Employer Health Insurance Survey conducted by the National Center for Health Statistics (Marker, Bryant and Wallace, 1996) and later from prior MEPS IC surveys.

The allocations determined the number of cases needed after data collection was complete and non-response accounted for in order to assure adequately small sampling errors. Thus, after allocations were made, the sample sizes were increased to allow for non-response and potential out-of-scope establishments. This assured the final responding sample sizes would match those produced by the allocation process. Selection of the private-sector sample within each stratum was accomplished using a systematic selection process. For this selection process the frame was sorted by SIC (Standard Industrial Classification) codes within each stratum. For more details on the MEPS IC List Sample design, see MEPS Methodology Report No. 6, July 1999.

Beginning with the 2000 survey, MEPS IC completed its industry code conversion from SIC codes to NAICS (the North American Industry Classification System) and the frame was sorted by NAICS codes. More information on the conversion from SIC to NAICS is available at the Census Bureau NAICS web site.

Data collection process

For all sample units except State governments and very large local governments, each sample unit is initially prescreened by telephone. The purpose of this screening is to:

- obtain the name and title of an appropriate person in each establishment to whom a MEPS IC questionnaire will be mailed,
- verify the address and identify any businesses that no longer exist, have closed, or have merged with others, and
- determine whether or not health insurance was offered to employees at this establishment during the prior calendar year. (The MEPS IC survey is a retrospective survey, asking about health insurance offerings during the previous calendar year. This is necessary in order to collect data for both the list sample and the household link sample cases at the same time.)

If the employer did not offer health insurance in the previous year, a brief set of questions about establishment characteristics are asked and the case is considered a complete respondent. This provides a quick and inexpensive method to collect the necessary data from the large number of employers who did not offer health insurance to their employees.

If the employer did offer health insurance in the previous year, several brief questions are asked and the employer is mailed a MEPS IC questionnaire. All establishments not reached during the screening process are also mailed questionnaires. If an establishment fails to return the initial mail questionnaire, a follow-up mailing is sent a few weeks later. Establishments that also fail to respond to the second mailing are contacted by telephone and the survey is conducted using Computer-Assisted Telephone Interviewing technology.

For the purpose of this survey, establishments indicating that they offered health insurance to their employees must answer key information on their health insurance offerings to be considered full respondents. Callbacks are made to respondents not providing all of the key information in order to complete their questionnaires. Respondents that do not provide this key information, but are known to offer insurance, are considered partial respondents. Establishments that were not prescreened, did not return the mail questionnaires and did not respond to follow-up phone calls are classified as non-respondents. For this group, the availability of health insurance for employees at the establishment is unknown.

Data for large governments and large private-sector firms, reporting for multiple establishments, are collected using specialized staff and forms. This is done to make the collection process simple and flexible and to reduce the burden as much as possible for these important respondents. Sometimes multiple telephone contacts and personal visits are needed to collect these data. For some of these collections, survey staff abstract data directly from company records and plan brochures if the firm insists on such methods.

Imputation of missing data

Individual respondents in the MEPS IC occasionally do not respond to all of the questions presented on the questionnaire. As is the custom for most surveys, important items that are missing are completed for all respondents using a process called imputation. This process provides the same full set of critical items for each respondent to anyone who wants to perform analyses with the data. In the case of the MEPS IC, the core of the imputation process is a form of "hot-deck" imputation, by which information for missing items is derived for an individual respondent using information from a similar respondent that has provided the necessary information.

The initial imputation process for the MEPS IC can be found in MEPS Methodology Report No. 10, December 2001. A significant expansion of the initial imputation process is documented in the paper Additional Imputations of Employer Information for the MEPS Insurance Component Since 1996.

Estimation

In sample surveys like the MEPS IC, non-certainty sample establishments represent not only themselves but also other similar establishments in the survey population. Therefore, in order to produce the survey estimates and standard errors presented in the MEPS IC tables, weights must be created for all responding establishments. A brief description of this process is provided here.

During the sample design and selection process, each establishment on the frame is given a probability of selection that is dependent on its stratum. These probabilities vary among establishments and assure that the sample sizes in each stratum are equal to that required by the allocation scheme. The inverse of this probability of selection is the establishment's base weight. The use of the base weight and the formula

$$T = \sum_i weight_i X_i$$

provides an unbiased estimate of a total T, if there is no non-response.

Because there is non-response, respondents' weights are adjusted to account for non-response so that these weights, when used with responding establishment data, will reduce the bias attributable to survey non-response. To accomplish this, the sample is divided into cells similar to the original sampling strata and the weights for each respondent in a specific cell are adjusted upward by the same percentage. The sum of the adjusted weights for respondents in these cells is equal to the sum of the base weights for all in-scope sampled establishments in the cell. Because it is assumed that the expected value of all responding establishments in each individual cell defined is equal to that of all the eligible respondents, use of the adjusted weights with respondents should produce the desired unbiased estimates of totals.

After adjustment for non-response, weights are post-stratified (Madow, Olkin, and Rubin, 1983.) using the frame of establishments in business during the last quarter of the year for which estimates would be made to produce control totals. For detailed information concerning construction of weights, see MEPS Methodology Report No. 8, November 1999.

Although railroads are included in the sample, the 13 largest railroads are not included in the MEPS IC tables. Employment for these railroads can not be broken down by State so their inclusion would distort results for States in which the headquarters of these railroads are located.

Reliability of estimates

For each table of estimates, a corresponding table of standard errors is also provided. Standard errors are produced using the method of random groups. (Skinner, Holt and Smith, 1989.) The method is as follows:

- During the sequential sample selection process, each establishment selected is assigned a number corresponding to its place in the order of selection. These selection numbers are converted to 10 groups numbered 0 to 9 by assigning an establishment to the group determined by the last digit in its selection number. Thus, if the selection number were 73, the establishment would be assigned to group 3. Each group can then be thought of as a subsample similar to the full sample with each unit with a chance of selection into the subsample that was one-tenth its chance of selection into the full sample.

- Using subsample weights that are 10 times the nonresponse adjusted weights of the full sample, ten subsample estimates, E_i , i = 1, ...10 are made in addition to the full sample estimate, E.

- The standard error is calculated as:

$$Std\ Err = \left[\sqrt{\frac{\left(E_i - E\right)^2}{90}} \right]$$

Definitions of terms

- Establishment – A particular workplace or physical location where business is conducted or services or industrial operations are performed.

- Firm – A business entity consisting of one or more business establishments under common ownership or control. Also known as an enterprise. A firm represents the entire organization, including the company headquarters and all divisions, subsidiaries and branches. A firm may consist of a single-location establishment or multiple establishments. In the case of a single-location firm, the firm and establishment are identical.

- Health insurance plan – An insurance contract that provides hospital and/or physician coverage to an employee or retiree for an agreed-upon fee for a defined benefit period, usually a year.

- Offer health insurance – To make available or contribute to the cost of any health insurance plan for current employees and/or retirees.

- Self-insured plan – A plan offered by employers who directly assume the major cost of health insurance for their employees. Some self-insured plans bear the entire risk. Others insure against large claims by purchasing stop-loss coverage. Some self-insured employers contract with an insurance company or third party administrator for claims processing and other administrative services.

- Single coverage – Health insurance that covers the employee only. Also known as employee-only coverage.

- Family coverage – Health insurance that covers the employee and one or more members of their family, as defined by the plan. If a plan offers more than one arrangement for family coverage, the costs for a family of four are collected.

- Exclusive-provider plan – A plan in which the covered persons must to go to providers associated with the plan for all non-emergency care in order for costs to be covered. Most health maintenance organizations (HMOs), individual practice associations (IPAs), and exclusive provider organizations (EPOs) are exclusive-provider plans.

- Any-provider plan – A plan that allows covered persons to go to the providers of their choice with no cost incentives to use a particular subset of providers. Most conventional-indemnity plans are any-provider plans.

- Mixed-provider plan – A plan that allows covered persons to go to any provider but there is a cost incentive to use a particular subset of providers. Most preferred provider organizations (PPOs) and point-of-service (POS) plans are mixed-provider plans.

- Managed care plan – Either a mixed provider or exclusive provider plan.

- Employee – A person on the actual payroll. Excludes temporary and contract workers but includes the owner or manager if that person works at the firm.

- Enrollee - An employee that is enrolled in a health insurance plan offered by the employer. Enrollees do NOT include any dependents covered by the plan.

- Covered persons - An enrollee plus any dependents covered by a health insurance plan. The MEPS IC survey has no data on covered persons.

- Low-wage employee – From 1996 through 1999, a low-wage employee was defined as employee making $6.50 per hour or less and that rate was not adjusted for increasing wage levels. Beginning with 2000, the definition of a low-wage employee was redefined as those earning at or below the 25th percentile for all hourly wages in the United States based on data from the Bureau of Labor Statistics. Using this new criterion, the dollar amount used to define this category will change each year based on the most recent wage data available so that the wage level will remain constant relative to overall wages from year-to-year. For 2000 and 2001, a low-wage employee is defined as someone who makes $9.50 per hour or less. Making comparisons of changes across the 1999 - 2000 survey years regarding low-wage employees is not recommended.

- Full-time employee – A term defined by the respondent. Generally, a full-time employee works 35 to 40 hours per week.

- Part-time employee – An employee not defined as full-time by the respondent.

- Firm size – The total number of employees for the entire firm as reported on the sample frame.

- Industry categories – The primary business activity as reported by the respondent. Industry categories are sometimes abbreviated in the tables (as shown in parenthesis in the list below) due to space limitations. From 1996 to 1999, the industries were based on SIC (Standard Industrial Classification) codes. Beginning in 2000, the industries were converted to NAICS (the North American Industry Classification System). Even industry categories that retained the same name during the SIC to NAICS conversion may not be comparable due to reclassification of specific businesses from one industry category to another. Making year-to-year comparisons of MEPS data by industries across the 1999 - 2000 boundary is not recommended. For more information on the SIC to NAICS conversion, visit the Census Bureau NAICS web site.

SIC industry categories (1996 - 1999 MEPS IC)		**NAICS industry categories (2000 + MEPS IC)**	
agriculture	(agric.)	agriculture	(agric.)
fishing	(fish.)	fishing	(fish.)
forestry	(forest.)	forestry	(forest.)
mining		mining	
manufacturing		manufacturing	
construction		construction	
retail trade		retail trade	
wholesale trade		wholesale trade	
transportation	(transp.)	transportation	(transp.)
utilities	(util.)	utilities	(util.)
communications	(commu.)	financial services	(fin. svs.)
finance	(fin.)	real estate	(real est.)
insurance	(ins.)	professional services	
real estate	(real est.)	other services	
services			

- Industry group (groupings) – A set of one or more industry categories combined for data estimation and reporting purposes.

- Division (Census division) – The States are grouped in the tables by the following Census divisions:

New England :
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Middle Atlantic:
New Jersey
New York
Pennsylvania

East North Central:
Illinois
Indiana
Michigan
Ohio
Wisconsin

West North Central:
Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

South Atlantic:
Delaware
District of Columbia
Florida
Georgia
Maryland
North Carolina
South Carolina
Virginia
West Virginia

East South Central:
Alabama
Kentucky
Mississippi
Tennessee

West South Central:
Arkansas
Louisiana
Oklahoma
Texas

Mountain:
Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

Pacific:
Alaska
California
Hawaii
Oregon
Washington

Table numbering system

The MEPS IC tables are numbered in a hierarchical structure that facilitates locating estimates, helps clarify specifically what the estimates are measuring, and provides a mechanism for calculating count estimates for tables where percentages are provided. The numbering structure also serves as the framework for the MEPSnet/IC interactive search tool.

- The first level of the table numbering system is by the following categories and by year:
  - I. Private-sector data by firm size and selected characteristics
  - II. Private-sector data by firm size and State
  - III. Public-sector data by government type, government size, and census division
  - IV. National totals for enrollees and cost of health insurance coverage for the private and public sectors
  - V. Private-sector data by industry groupings and State
  - VI. Private-sector data by ownership type and age of firm and State
  - VII. Private-sector data by proportion of employees who are full-time or low-wage and State

- Within each of these categories, tables are subsequently grouped by:
  - A. Establishment-level tables
  - B. Employee-level tables
  - C. Premiums, employee contributions, and enrollment tables for single coverage plans
  - D. Premiums, employee contributions, and enrollment tables for family coverage plans

- Tables within each of these categories are ordered based on their inter-relationships.

To clarify what each MEPS IC table is measuring, it will be helpful to use the table (Table 1) provided on the next page. For each of the MEPS IC tables (excluding Table IV), Table 1 identifies the denominator table of that table.

Examples are provided in the next section of how Table 1 can be used to calculate approximate counts from the percentage estimates in the MEPS IC tables.

Table 1 - Listing of MEPS IC Table Numbers and Denominators for Tables

Table Number	Denominator for Table		Table Number	Denominator for Table
A.1.				
A.1.a.	A.1.		C.1.	
A.2.	A.1.		C.1.a.	
A.2.a.	A.2.		C.1.b.	
A.2.b.	A.2.		C.1.c.	
A.2.b.(1).	A.2.		C.2.	
A.2.b.(2).	A.2.		C.2.a.	
A.2.b.(3).	A.2.		C.2.b.	
A.2.c.	A.2.		C.2.c.	
A.2.c.(1).	A.2.		C.3.	C.1.
A.2.c.(2).	A.2.		C.3.a.	C.1.a.
A.2.c.(3).	A.2.		C.3.b.	C.1.b.
A.2.d.	A.2.		C.3.c.	C.1.c.
A.2.e.	A.2.		C.4.	B.2.b.
A.2.f.	A.2		C.4.a.	C.4.
A.2.g.				
B.1.			D.1.	
B.1.a.	B.1.		D.1.a.	
B.2.	B.1.		D.1.b.	
B.2.a.	B.2.		D.1.c.	
B.2.a.(1).	B.2.a.		D.2.	
B.2.b.	B.2.		D.2.a.	
B.2.b.(1).	B.2.b.		D.2.b.	
B.2.c.	B.2.		D.2.c.	
B.3.			D.3.	D.1.
B.3.a.	B.3.		D.3.a.	D.1.a.
B.3.b.	B.3.		D.3.b.	D.1.b.
B.3.b.(1).	B.3.b.		D.3.c.	D.1.c.
B.3.b.(1).(a).	B.3.b.(1).		D.4.	B.2.b.
B.3.b.(2).	B.3.b.		D.4.a.	D.4.
B.4.				
B.4.a.	B.4.			
B.4.b.	B.4.			
B.4.b.(1).	B.4.b.			
B.4.b.(1).(a).	B.4.b.(1).			
B.4.b.(2).	B.4.b.			

Calculation of approximate counts and their standard errors

Many of the MEPS IC tables contain percentage estimates instead of count estimates. For instance, Table I.B.2 gives the percentage of employees who work in establishments that offer health insurance. Table I.B.2.a gives the percentage of employees who work at establishments that offer health insurance and who are eligible for health insurance. For most tables of percentages, a count of the number of employees or establishments in any cell in the table can be calculated using data, for that cell, from the current table and one or more tables containing the denominator(s) for that cell.

To produce count estimates, one simply multiplies the cell values from the selected table and all of the denominators for that cell. For example, if one desired an estimate of total establishments that offer health insurance, one can find the percentage of these establishments in Table I.A.2 and determine from Table 1 on the previous page that Table I.A.1 contains the value in the denominator of this percentage.

Thus, the estimated total number of establishments that offer health insurance in 1996 is:

.529(percentages must be converted to decimals) x 5,956,479 = 3,150,977.

The first number (.529) is from Table I.A.2 and the second (5,956,479) is from Table I.A.

An approximate standard error for this count estimate can be computed using this formula:

$$Err(Est(1)*Est(2)) = Est(1)*Est(2)\sqrt{\frac{Err(1)^2}{Est(1)^2}+\frac{Err(2)^2}{Est(2)^2}}$$

where Est(1) and Est(2) are the estimates from the two tables and Err(1) and Err(2) are the standard errors for those estimates.

$$Std.Err = (.529)*(5{,}956{,}479)\sqrt{\frac{(.0032)^2}{(.529)^2}+\frac{(29{,}537)^2}{(5{,}956{,}479)^2}} \quad = 24{,}647$$

For some tables, a hierarchical structure exists so more than two tables are needed to derive an approximate count. For example, look at Table I.B.2.a, the percentage of employees eligible for health insurance. Table I.B.2. is listed as its denominator for Table I.B.2.a and Table I.B.1 is the denominator for Table I.B.2. The values from all three tables, I.B.1, I.B.2, and I.B.2.a must be used to derive an estimate of the count. Thus, the estimated total number of employees eligible for health insurance is.813 x .865 x 103, 482,267= 72,773,387, with the three values coming from Tables I.B.2.a, I.B.2, and I.B.1 respectively. Basically, one must multiply by a series of denominators until one reaches a table with numbers instead of percents (the shaded areas of the Table 1 on the previous page). The standard error for this count estimate can be computed by using a logical expansion of the standard error formula provided above.

Revision of the original 1996 tables

Significant revisions and enhancements were made to the original 1996 tables posted on the AHRQ website. In addition to the large number of new tables produced and the introduction of the new table numbering system previously described, additional revisions to the 1996 tables were made based upon:

- Improved imputation methods using additional data collected during the second year of the survey.
- Modifications of the weighting methodology to better control for known industry totals.
- Availability from the SSEL of more precise values for firm size for the time period covered.

These revisions were critical to support year-to-year comparisons with future MEPS IC years. The previously issued tables for 1996 should be discarded and not used for this purpose. We are no longer posting them on our website, but they are available upon request. AHRQ does not anticipate making revisions of this magnitude in future years.

References and MEPS IC publications

Branscome JM, Brown E. State differences in job-related health insurance, 1998. Rockville (MD): Agency for Healthcare Research and Quality;2001. MEPS Chartbook No. 7. AHRQ Pub. No. 01-0036.

Branscome JM, Crimmel BL. Changes in job-related health insurance, 1996-99. Rockville (MD): Agency for Healthcare Research and Quality;2002. MEPS Chartbook No. 10. AHRQ Pub. No. 02-0030.

Bureau of Labor Statistics. Current Employment Statistics, Most requested series, Series EEU00500005, 1996. Available from URL: http://www.bls.gov/ces/

Cochran WG. Sampling Techniques. New York: John Wiley and Sons; 1977.

Cohen JW, Monheit AC, Beauregard KM, Cohen SB, Lefkowitz DC, Potter DEB, Sommers JP, Taylor AK, Arnett RH. 1996. The Medical Expenditure Panel Survey: a national health information resource. Inquiry 33: 373-389.

Kreps J, Slater CM, Plotkin MD. The Standard Statistical Establishment List Program. Washington (DC): United States Bureau of the Census; 1979. Technical Paper No. 44.

Marker D, Bryant E, Wallace L, Yansaneh I. National Employer Health Insurance Survey (NEHIS): draft final methodology report; volume I: statistical methodology. Rockville (MD): Westat, Inc.; 1996.

Madow WG, Olkin I, Rubin DR. Incomplete data in sample surveys, volume 2: theory and bibliographies. New York: Academic Press; 1983.

Peterson CL, Vistnes JP. State differences in job-related health insurance, 1996. Rockville (MD): Agency for Healthcare Research and Quality;2000. MEPS Chartbook No. 4. AHRQ Pub. No. 00-0017.

Skinner CT, Holt D, Smith TMF, Analysis of complex surveys. New York: John Wiley and Sons; 1989.

Sommers JP. List sample design of the 1996 Medical Expenditure Panel Survey, Insurance Component. Rockville (MD): Agency for Health Care Policy and Research; 1999. MEPS Methodology Report No. 6. AHCPR Pub. No. 99-0037.

Sommers JP. Construction of weights for the 1996 Medical Expenditure Panel Survey, Insurance Component list sample. Rockville (MD): Agency for Health Care Policy and Research; 1999. MEPS Methodology Report No. 8. AHCPR Pub. No. 00-0005.

Sommers JP. Imputation of employer information for the 1996 Medical Expenditure Panel Survey Insurance Component. Rockville (MD): Agency for Healthcare Research and Quality; 2000. MEPS Methodology Report No. 10. AHRQ Pub. No. 00-0039.

Sommers JP. Additional imputations of employer information for the MEPS insurance component Since 1996. Rockville (MD): Agency for Healthcare Research and Quality; 2001. Web publication available at www.meps.ahrq.gov/MEPSDATA/ic/IMPMeth2.HTM.